

Date: Wed, 13 Apr 94 04:30:51 PDT
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Ham-Space-Errors@UCSD.Edu
Reply-To: Ham-Space@UCSD.Edu
Precedence: Bulk
Subject: Ham-Space Digest V94 #90
To: Ham-Space

Ham-Space Digest Wed, 13 Apr 94 Volume 94 : Issue 90

Today's Topics:

 Building Sat antennas
 Eprom 27C512 with access time of 120 ns
 STS-59 Orbital State Vectors Rev #57

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 12 Apr 1994 13:34:36 GMT
From: elroy.jpl.nasa.gov!swrinde!cs.utexas.edu!howland.reston.ans.net!pipex!sunic!
psinnntp!psinnntp!arrl.org!zlau@ames.arpa
Subject: Building Sat antennas
To: ham-space@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: A nice simple antenna for S band can be constructed of all thread rod
: for the boom, fender washers for parasitic elements, and a bunch of jam
: nuts to hold everything in place. The crossed dipole driven elements can
: be made from a piece of printed circuit board (duroid) with the driven
: elements and their phasing and matching harnesses etched onto the board
: and held in place with nylon jam nuts. The whole thing will fit in a piece
: of PVC or fiberglass tubing for weatherproofing, or you can just cover the
: driven elements and reflector with pipe and let the rest hang out in the
: breeze after a cold galvanize spray. (You could use circuit board for
: all the elements, but that much duroid board gets expensive.)

: (You can use a short bolt, a drill, and a file to size the OD of the

: parasitic element washers. Just put the washer on the bolt with jam
: nuts, chuck it in the drill, and file to size.)

So how big does the boom have to be for it to work well on Oscar 13?
A 15 turn helix on a 20 inch boom seems to work just fine with a good
PHEMT preamplifier (0.33 dB system NF). On a 10 degree pass I heard
the beacon from ARRL HQ parking lot through the roof of W1AW quite well.
I read up in Kraus on the dimensions to use. The boom length includes
the rear mounting bracket. The receive converter is a little too
light to balance the antenna.

When receiving, you don't want your phasing networks to be too lossy,
raising your system noise figure. True, you could just use a big
dish, but I don't think I could carry stick a 4 ft. dish in my
carry-on luggage and get away with it :-). At least on Domestic
flights, they will always let you carry on on 22 x 14 x 9 inch
bag.

--

Zack Lau KH6CP/1 2 way QRP WAS
 8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

Date: 12 Apr 94 14:54:33 GMT
From: sinetnews!news.u-tokyo.ac.jp!wnoc-tyo-news!glocom!tyo-noc-news!jh1ynw!
marina!kohjin@rsch.wisc.edu
Subject: Eprom 27C512 with access time of 120 ns
To: ham-space@ucsd.edu

In article <seeler.101.0@UPEI.CA> seeler@UPEI.CA (David Seeler) writes:
>I was wondering if anyone knew of a Canadian or US distributor or supplier
>for the following two items which are being considered for the Trakbox
>hardware upgrade:
>
>1. 27C512 Eprom (Dip package) with 120 nanosecond access time.
>2. Dallas Semiconductor microprocessor DS80C320
>
>Any suggestions as to names or numbers would be greatly appreciated.
>
>73 de David Seeler,
>VY2DCS
>Internet: seeler@upeil.ca

DALLAS SEMICONDUCTOR

4401 South Beltwood Parkway
Dallas, Texas 75244-3292

FAX:+1 214 450 3715
Phone: 214 450 0448

80C320 \$15 Payment with Card acceptable.

Sorry but don't know of Eprom source in CA & USA.

--
----/---- Kohjin Yamada, JR1EDE [kohjin@marina.prug.or.jp]
Q----T-----H 504-55 Shimo-Yamaguchi, Hayama, Miura, Kanagawa, Japan
-----/|----- Phone:+81-468-75-6750 Fax/Modem/Voice:+81-468-76-1176

Date: Wed, 13 Apr 1994 00:10:45 GMT
From: ihnp4.ucsd.edu!news.cerf.net!mvb.saic.com!MathWorks.Com!
europa.eng.gtefsd.com!howland.reston.ans.net!cs.utexas.edu!swrinde!sgiblab!
news.kpc.com!amd!netcomsv!netcomsv!netcom.com!astroman@@
Subject: STS-59 Orbital State Vectors Rev #57
To: ham-space@ucsd.edu

Vector format = 1017
Satellite Name: STS-59
Catalog Number: 23042 94020A
Epoch Date/Time: 94102.92530216435
 04/12/1994 22:12:26.106 UTC
ECI X: 6085338.798417 ft
M50 Y: -12845218.379862 ft
 Z: 16302031.674325 ft
 Xdot: 14693.08594 ft/s
 Ydot: 18689.21484 ft/s
 Zdot: 9239.76172 ft/s
ndot/2 (drag): 0.01295477563 rev/day^2
nddt/6: 0.00000E+00 rev/day^3
Bstar: 5.87760E-04 1/Earth Radii
Elset #: 12
Rev @ Epoch: 57.17838537400

MSDOS/PC software is available for conversion of
OSV to 2 Line Keplerian Elements via ftp to:

oak.oakland.edu:/pub/msdos/hamradio/v219331.zip
and the SIMTEL archives.

State Vectors courtesy Ken Ernandes N2WWD

SM

End of Ham-Space Digest V94 #90
